

Abstract

A drive method of a CCD color image sensor for realizing an electronic shutter function with the signal charge accumulation time varying from one color to another according to a simple structure is provided. Unnecessary charges occurring in photoelectric conversion element groups of colors are transferred in shift registers in the time period in which signal charges are accumulated in the photoelectric conversion element groups of at least colors of R, G, and B ($t_2 < t < t_5$), and the signal charges accumulated in the photoelectric conversion element groups of colors in response to different time periods according to the colors set in the photoelectric conversion element groups of colors (R: $t_4 < t < t_5$, G: $t_3 < t < t_5$, and B: $t_2 < t < t_5$) are transferred in the shift registers in the time period in which unnecessary charges are accumulated in the photoelectric conversion element groups of colors ($t_0 < t < t_1$).